

## **ABSTRACT**

1           A data storage device that includes an array of resistive memory cells and a circuit  
2 that is electrically connected to the array. The resistive memory cells include magnetic  
3 random access memory cells that are electrically connected to diodes. The circuit is  
4 capable of applying a first voltage to some of the resistive memory cells in the array, a  
5 second voltage to other cells in the array, and a third voltage to yet other cells in the array.  
6 Also, a method of sensing the resistance state of a selected resistive memory cell using  
7 the circuit.